LISTING OF CLAIMS

1(cancelled).

2(currently amended). The optoelectronic device of Claim 15 wherein the first film ~~of claim 1 wherein said particle size~~ comprises particles having a particle size of [[is]] less than about 200 nm.

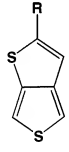
3(cancelled).

4(cancelled).

5(canclled).

6(currently amended). The optoelectronic device of Claim 15 wherein the first film ~~of claim 2 wherein said film~~ has a conductivity of from about 10^{-2} to 10^{-5} S/cm.

7(currently amended). The ~~film of claim 1~~ optoelectronic device of Claim 15 wherein the ~~conducting polymer~~ thieno[3,4-b]thiophene comprises substituted or unsubstituted, uncharged or charged polymerized units of



(I)

where R is hydrogen, substituted or unsubstituted (C_1-C_{18})-alkyl, preferably (C_1-C_{10})-alkyl, in particular (C_1-C_6)-alkyl, for example, *t*-butyl, (C_3-C_7)-cycloalkyl, (C_1-C_{18})-alkyloxy, preferably (C_1-C_{10})-alkyloxy, or (C_2-C_{18})-alkyloxy ester, phenyl and substituted phenyl, SF_5.

8(currently amended). [[A]] The optoelectronic device of Claim 15 wherein the first film is obtained from a dispersion comprising water, at least one member selected from the group consisting of polymeric sulfonic acids and polystyrene sulfonic acids, and at least

one conducting polymer ~~containing particles having a particle size of less than about 200 nm, wherein the conducting polymer comprises polymerized units of a polythiophene and wherein a film drop cast from the dispersion has a conductivity from about 10^{-2} to 10^{-6} S/cm when measured using the four point probe method~~.

9(currently amended). The ~~dispersion~~ optoelectronic device of claim 8 wherein said member comprises polymeric sulfonic acids.

10(currently amended). The ~~dispersion~~ optoelectronic device of claim 8 wherein said member comprises polystyrene sulfonic acids.

11(cancelled).

12(cancelled).

13(cancelled).

14(cancelled).

15(currently amended). An optoeletronic device comprising a substrate, an anode, a cathode and a first film located between the anode and cathode that comprises substituted or unsubstituted, uncharged or charged polymerized units of thieno[3,4-b]thiophene, and wherein the first film has a conductivity from about 10^{-2} to 10^{-6} S/cm and wherein the device has a rectification ratio of greater than about 75; and a second polymeric film comprising a light emitting polymer that comprises at least one member selected from the group consisting of poly(phenylene vinylene)s and polyfluorenes.

16(previously presented). The optoelectronic device of claim 15 wherein said device comprises a member selected from the group consisting of a light emitting diode, a photovoltaic device, and a laser diode.

17(previously presented). The optoelectronic device of claim 15 wherein said first film comprises a hole injection layer.

18(previously presented). The optoelectronic device of claim 15 wherein said first film comprises a hole transport layer.

19(previously presented). The optoelectronic device of claim 15 wherein said first film comprises a hole injection and hole transport layer.

20(cancelled).

21(currently amended). The optoelectronic device of claim [[20]] 15 wherein the second film comprises a poly(phenylene vinylene) and said poly(phenylene vinylene) comprises poly(2-methoxy, 5-(2'-ethyl-hexyloxy)-p-phenylene-vinylene).

22(currently amended). The optoelectronic device of Claim 15 wherein said device comprises a light emitting diode and has a brightness at a current density of 100mA/cm2 of greater than about 830 cd/m2.

23(previously presented). The optoelectronic device of Claim 15 wherein the device comprises a photovoltaic device, said first film comprises a hole transport layer, and said second film comprises at least one member selected from the group of semiconductive hole transporting layer and semiconductive electron transporting layer.

24(new). An optoeletronic device comprising a substrate, an anode, a cathode, and a first film located between the anode and cathode that comprises substituted or unsubstituted, uncharged or charged polymerized units of thieno[3,4-b]thiophene, and wherein the first film has a conductivity from about 10^{-2} to 10^{-6} S/cm, and a second polymeric film comprising a phosphorescent emitter comprising tris(2-(4-tolyl)phenylpyridine) iridium (III).